

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, increasing the rental for oil and gas lease W 77436.

Affirmed.

1. Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Rentals

Where the Bureau of Land Management has determined that any part of the lands described in a noncompetitive oil and gas lease is within an undefined addition to a known geologic structure, the lessee is required to pay increased rental of \$ 2 per acre for the entire lease.

2. Oil and Gas Leases: Applications: Generally -- Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Noncompetitive Leases

One who challenges a determination by the Bureau of Land Management that land is within the known geologic structure of a producing oil or gas field has the burden of showing that the determination is in error.

APPEARANCES: Ronald C. Agel, Wellesley, Massachusetts, pro se; Lowell L. Madsen, Esq., Office of the Regional Solicitor, Denver, Colorado, for the Bureau of Land Management.

#### OPINION BY ADMINISTRATIVE JUDGE HARRIS

Ronald C. Agel filed a simultaneous oil and gas lease application for parcel WY 1721 in the September 1981 simultaneous oil and gas filings. His application was selected with first priority and effective June 1, 1982, he was issued a noncompetitive oil and gas lease, W 77436, for 200 acres of land in Converse County, Wyoming.

On May 16, 1984, the Wyoming State Director, Bureau of Land Management (BLM), received a notice from the BLM District Manager, Casper, Wyoming, informing him that certain lands, including part of the lands in W 77436, had

been included within "an undefined addition to the Shawnee undefined Known Geologic Structure [KGS] effective April 27, 1984." 1/

On July 26, 1984, BLM issued a decision informing Agel that annual rental for the acreage in his lease would be increased to \$ 2 per acre through the fifth lease year on the basis of the KGS determination. Agel seeks review of that decision.

On appeal Agel states that BLM's decision must be in error because "[t]his is a lease that I have now owned for nearly 3 years and have not received a single offer of even a dollar to buy it." He reasons that if the lease were worth something, someone would offer to buy it from him. He further states that just because this lease may be near a producing field does not mean that it is on a KGS. He believes that if information exists which establishes that his lease has greater value so as to qualify it for increased rental, it should be made available to him.

On April 1, 1985, the BLM District Manager, Casper, filed documentation with the Board in support of the KGS determination. There was no indication that such information was served on appellant. Therefore, by order of the same date the Board provided appellant with a copy of BLM's geologic discussion report and offered appellant the opportunity to file any desired response. On April 15, 1985, appellant filed a response. Therein, he relies upon certain portions of the geologist's analyses contained in the geologic discussion report. Appellant argues:

I rest my appeal solely on the opinion of the geologist who in fact did the [KGS] study. I bring your attention to page 3 the second paragraph under number 2. 2/  
The geologist suggests

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1/ A "known geologic structure" is presently defined as "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1).

2/ That part of the report reads in pertinent part:

"2. Inferred O foot isopach: the 10 foot of porosity greater than or equal to 10% (from neutron-density logs or sonic [derived] logs) represents the boundary of the remaining additions. All quarter-quarter legal subdivisions or lots intersected by the O isopach were included in the additions. The inferred O isopach was extended to the adjoining KGSs or to the subsurface fault projection of the preceding criteria.

"(Some concern has been raised by this author in regard [sic] to the extension of the inferred O isopach in the northeast. This portion of the study area lacks subsurface information due to the shallower drilling for completions in the Teapot Sandstone. This author feels that the lack of sufficient subsurface data could provide a legitimate boundary since the extension of the inferred isopach cannot be substantiated. However, upon the recommendation of two senior geologists, the inferred O isopach was extended based on the best interpretation this author could provide. The extension of the inferred isopach cannot be shown to be inaccurate with the the available information,

that it is an arbitrary decision and that the study clearly lacks subsurface information to provide any legitimacy to the boundaries that are being proposed. He further suggests that they cannot be substantiated and has brought this to the attention of the geologists that have asked him to do the study. The extension of the inferred O isopach was made on the best interpretation that this author could provide but obviously at no more than a guess. "The extension of the inferred isopach cannot be shown to be inaccurate within the available information, but it seems contrary to this author that this type of approach should be used when defining the potential boundary of a 'known' geologic structure." Clearly the geologist is suggesting that this is not the way a KGS determination should be made. He further states that it is in fact "arbitrary in substance."

If in fact the geologist doing the study considers this arbitrary and contrary to the approach that he feels should be used, surely it does not seem a just decision to change the designation of this lease.

Furthermore there has been no exploration in the area of any substance and no one has made any offer or suggestion that this lease is worth anything whatsoever. No one has made an offer to me and the lease has continued to be a cost of the rental that I sustain each year. [Emphasis in original.]

In answer to this argument by appellant, counsel for BLM provides the statement of a BLM geologist, Frank Partridge, which reads in relevant part:

After reviewing the geologic report, and the legal boundaries of lease W-77436, it is my determination that the appellant's reasoning is not applicable, in fact, is out of context. Furthermore, the KGS determination was based on sound technical and professional practices, and should be upheld.

The following facts support this action:

A.) Lease W-77436 was issued for lands in Township 32 North, Range 69 West,

Sec. 13, N 1/2 NW 1/4;  
Sec. 14, SE 1/4 NE 1/4;  
Sec. 15, W 1/2 SE 1/4.

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fn. 2 (continued)

but it seems contradictory to this author that this type of approach should be used when defining the potential boundary of a "known" geologic structure. Whether the boundary is based either on a limit of geologic information or on an inferred geologic parameter, both are susceptible to being arbitrary in substance. This situation is an example of a common problem which must be addressed in the near future in order to secure a continuity for geologic interpretation.)"

Therefore, the only portion of the lease affected by the KGS addition is Sec. 13, N 1/2 NW 1/4, which is in the southern edge of the field (Exhibits 1 and 2).

B.) Page three, paragraph two of the report states "The two following criteria(s) were used to establish the boundaries of the additions:

1. Fault boundary on the southern edge of the field: the subsurface projection of the major fault . . . was selected since this is (a) physical barrier against migration or reservoir communication." \* \* \*

These faults are documented in Goetze's report by references to Wolff, 1931; Runge, 1983; and Schmidt, 1982. Therefore, the actual limit of the trap is a fault projection.

C.) The reservation which the Appellant partially quoted applies specifically and only to the northeast portion of the KGS addition. The last paragraph on page three of the report begins, "(Some concern has been raised by this author in (regard to the extension of the inferred O isopach in the northeast. This portion of the study area lacks subsurface information . . ." \* \* \*

It becomes clear that Goetze is not questioning the use of the zero-isopach as a limit of potential reservoir, which is an established practice, but rather is questioning the use of an inferred zero-isopach in areas of scarce subsurface information, where a pinchout of reservoir determines the KGS boundary. Only one-mile north of the Appellant's tract is a producing well with ten feet of pay sand, apparently downstructure, both of which lend credence to the decision that the tract is "potentially productive."

Therefore, well-information, isopachous values, and reservoir limits are adequate, reasonable and justified.

[1] Where BLM has determined that any part of the lands described in a noncompetitive oil and gas lease is within an undefined addition of a KGS, the lessee is required to pay increased rental of \$ 2 per acre for the entire lease. 43 CFR 3103.2-2(d); 3/ Eagle Exploration Co., 83 IBLA 354 (1984).

[2] One challenging a Departmental determination that land is within the KGS of a producing oil or gas field has the burden of showing that the

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3/ That regulation provides:

"On lands within a lease issued under Subpart 3111 of this title after the effective date of this regulation which is later determined to be within a known geologic structure outside of Alaska \* \* \*, the annual rental shall be \$ 2 per acre or fraction thereof beginning with the first lease year after the expiration of 30-days notice to the lessee. During the first 5 years of the lease term, the same rental increase is applicable to leases issued under Subpart 3112 of this title."

determination is in error. Eagle Exploration Co., *supra* at 356 and cases cited therein. See also Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984).

It is well established that this Board may rely on reports of the Secretary's technical experts. Woods Petroleum Co., 86 IBLA 46, 52 (1985); John P. Brogan, 85 IBLA 379, 383 (1985). In Champlin Petroleum Co., 86 IBLA 37, 40 (1985), we noted that "[w]hile the conclusions drawn from geological data are subject to different interpretations, the Secretary is entitled to rely upon the reasoned opinion of his technical expert in the field," citing Bruce R. Anderson, 63 IBLA 111 (1982). The Secretary has traditionally delegated the duty for determination of the existence and extent of a KGS to his technical expert in the field. A determination by Departmental technical experts will not be set aside where it is not arbitrary or capricious, and is supported by competent evidence. Woods Petroleum Co., *supra* at 52; Davis Oil Co., 53 IBLA 62, 67 (1981). Courts have often deferred to technical determinations made by administrative agency experts. As noted by the Supreme Court in Federal Power Commission v. Florida Power & Light Co., 404 U.S. 453, 463 (1972):

A court must be reluctant to reverse results supported by such a weight of considered and carefully articulated expert opinion. Particularly when we consider a purely factual question within the area of competence of an administrative agency created by Congress, and when resolution of that question depends on "engineering and scientific" considerations, we recognize the relevant agency's technical expertise and experience, and defer to its analysis unless it is without substantial basis in fact.

Our recent cases, Carolyn J. McCutchin, 86 IBLA 13 (1985), and Carolyn J. McCutchin, 84 IBLA 368 (1985), are distinguishable. Those cases involved challenges to BLM's rejection of certain oil and gas lease offers because the lands had been designated as KGS's. In both cases we set aside the BLM decisions and remanded the cases because the BLM case record failed to support the challenged KGS determinations. The McCutchin cases and the case cited as support for the conclusion in those cases, Thomas Connell, 82 IBLA 132 (1984), each involved the submission of information tending to contradict the KGS determinations. As the Board stated in Thomas Connell, *supra* at 133:

[W]here \* \* \* appellant submits evidence tending to contradict a determination that land embraced in the lease offer is within a KGS and there is nothing in the record to support the decision except the conclusory statement that the land is in a KGS, the decision may be set aside and the case remanded to substantiate the basis for the KGS determination in light of the information tendered by appellant.

In this case appellant has submitted no evidence which would tend to contradict BLM's KGS determination. Rather, appellant seizes upon an aspect of the geological discussion report where the geologist expressed some concern over the KGS boundary. BLM, however, in the statement submitted May 23, 1985, points out that the reservation expressed by the geologist related to another area of the KGS, and that there was no question that the southern edge of the field, including certain lands in appellant's lease, was properly determined to be within a KGS. Appellant has failed to meet his burden.

Appellant's allegation that no one has offered to buy his lease is not evidence that would support a claim that the lands are not KGS. A KGS determination is based upon technical geologic information and oil or gas drilling data available to the Secretary's technical expert, in this case, BLM. The determination encompasses all acreage that is presumptively productive. It is not a guarantee of the marketability of leased lands within the KGS.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

Bruce R. Harris  
Administrative Judge

We concur:

C. Randall Grant, Jr.  
Administrative Judge

Edward W. Stuebing  
Administrative Judge

